Figure

Amino Acid Sequence Alignment of ORF H10638

Influenzae HI0638	multocida	coli	rae	aphidicola	aeruginosa	
Haemophilus		Escherichia	Vibrio cholerae	Buchnera aph	Pseudomonas	

-MKNYHD-IVLALAGVCQSAKLVHQLATESRADSETFLTALNSLFITQPQ
-MANYYD-ITLALAGVCQAAKLVQQFAHEGQADQAAFETSLNTLLQIYPE
MAKNYYD-ITLALAGICQSARLVQQLAHQGHCDADALHVSLNSIIDMNPS
MANAIYD-RTIAFAGICQAVALVQQVAKNGYCDSDAFETSLKAITCTNPS
-MKKIHL-ITLSLAGICQSAHLVQQLAYSGKCDSNAFSICLKSILEINPT
-MSDPRQ-QLIALGAVFESAALVDKLARTGQISEAPLGCMLGSLLARNPA
-MNALIDNRVLALAGVVQALQQVRQIAETGQSETSAVRTAINSVLRIDAE

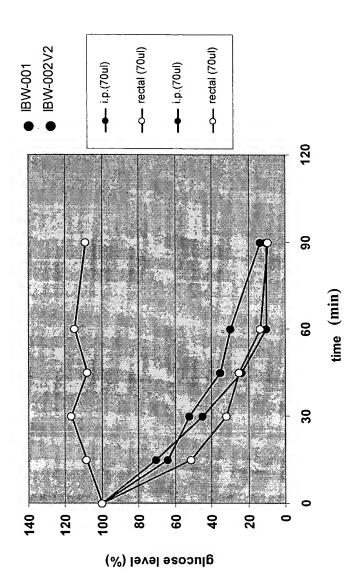
RIEDVFGGEVRHLKLGLETLIHQLNAQGD----QNLTRYWLSLLALEGKLSKNSDAKQTLGNRISRLKEQEIHYARDSE-TMLSIMANIYSDIIS DTLAVFGGKAQNLKLGLETLLEQMHGTG-----SDLSRYWISLLALESKLNKDPHAKAELARRIQYLPTQLEHYDLLDE-QMLSTLASIYVDVIS STLAVFGGSEANLRVGLETLLGVLNASSRQGLNAELTRYTLSLMVLERKLSSAKGALDTLGNRINGLQRQLEHFDLQSE-TLMSAMAAI¥VDVIS NTLEVFG-HESQLKLGLECLVKGIDSTPS--G-SEITRYLISLMALERKLSGRRDAMSQLGDRIQMIERQLDHFDLFDD-QMISNLASIYLDVIS SFIAIYGNHEKNLIIGLEILLSTLTFSSFSYSYIELIKYISNMMIIEKKLKKSRTAIYSLKNKISVIS-SEYYLNYNIK-NLTRKLGELYLEIIS STLDVYGGDSLNLRDGFKALASALERKPGS-LQREPLRYALAMLTLERQLDKRGDMLDLIGQRLDQVEQQVQHFGLVHE-NVIASFASIYQDTLS SPEAVYG-RIRDLTQGLQLLHDYFGNQLR----DQLLPRLALAVLQLERRFIRDTSIVAAVSAGITQAAHQVEQTGDSAHPEVLSTLGALYANTIS

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NO:64
ID NO:59
                      ID NO:60
                                             NO:61
                                                                    NO:62
                                                                                           NO:63
                                            H
                                                                    H
                                                                                           n
n
                                                                                                                 I
D
                                                                                                                   SEQ
SEQ
                       SEQ
                                             SEQ
                                                                    SEO
                                                                                           SEQ
                                                                                      SLGSRIVIKGIKDFLQDHQIQEKIRCLLFSGIRAIVL#KQYGGNQLQLIYFRYFIIKKAKKILYHLKDAT
                                            PLGPRIQVTGSPAVLQSPQVQAKVRATLLAGIRAAVLWHQVGGGRLQLMFSRNRLTTQAKQILAHLTPEL
 PLGKKIHILGSPDYLRQELVQNKIRAVLLAGIRSAVLWKQMGGTKWQILFFRRKLLATAKQIYSSIY---
                                                                                                          TFRQRIQVHGDMRHLQVSSNAARIRALLLAGIRSARLWRQLGGSRWQMVFSRRRLLNELYPLLRG----
                      PLGKKIQVTGSTLYLQQLAMHHRIRACLLAGIRSAVLWRQVGGTKWQVLFSRRKIIAMAKQIYSSL---
                                                                  PIGPRIQVTGTPAVLQQTANQHKVRALLLSGIRCAVLWRQVGGRRRHLIFGRKKMIEQAQILLAR----
                                                                                                                              HLRPRIIVQGNPHYLGQAGVVAEIRAMLLAALRSAVLWRQLNGNLLDFMLAKRAMAAATERALR----
                                                                                                                                                          *****
```

Figure 2

Homology Search of the N-terminus (amino acids 3-26)

A K L V H Q L SEQ ID NO:1 A K L V Q Q F SEQ ID NO:2 A R L V Q Q L SEQ ID NO:3 V A L V Q Q V SEQ ID NO:4 A H L V Q Q L SEQ ID NO:4 A A L V D K L SEQ ID NO:5 L Q Q V R Q I SEQ ID NO:6	V F L L Q Q Y SEQ ID NO:8 A F N A A F N SEQ ID NO:9 V K G V Q Q Y SEQ ID NO:10 A R A G D I S SEQ ID NO:11 A Q M V F V T SEQ ID NO:12
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
NYYHDIVLALAGV NYYDITLALAGGV NYYDITLALAGGV AIYDRTIAFAGI KIHLITLSLAGI DPRQQLIALGAV LIDNRVLALAGV	N L P P I V L A V I G I N Y F I V N L A L A D L T A F D F N K M L D G V R A I L I P L A L A G L R N L T K T S L L L A G L
Haemophilus influenzae Pasteurella multocida Escherichia coli Vibrio cholerae Buchnera aphidicola Pseudomonas aeruginosa Xylella fastidiosa	Rhizobium loti (prot1) Human NK-2 RECEPTOR Chlamydia pneumoniae Rhizobium loti (prot2) NprB Bac. Subtilis M



Glucose Levels in Mice Following Insulin Translocation Across Epithelial Cell Membranes

Figure 4

Glucose Levels in Rats Following Insulin Translocation Across Epithelial Cell Membranes

